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Welcome and Greetings from Kevin Yee: (New) Director of the Faculty Center



Kevin joins us as the Faculty Center Director after several years in a similar role at the University of South Florida. This is a homecoming for Kevin, having worked at the Faculty Center from 2004-2012.

Welcome from a new FCTL director! We're partway through an interesting academic year, with new angles to consider from seemingly all directions: technology, legislation, weather-related closures, and many more.

If you haven't met us before, consider the Faculty Center your one-stop-shop for questions related to face-to-face teaching. We offer workshops, major events, faculty cohort teams, teaching observations, and individual consultations—all for free. While we happily partner with department chairs and deans' offices, and frequently offer programming for entire departments, when it comes to individual consultations, we are a private service, meaning we do not report faculty participation to anyone.

I'm delighted to be back at UCF. The culture here is so dedicated to teaching, and the members of the community so dedicated to each other, that the sense of belonging is almost palpable. The members of the FCTL team take our duty to serve this faculty community seriously, and so we are always looking for new pedagogical strategies to investigate, new technologies to fold into teaching, and new ways to bring intentionality to the enterprise of teaching, whether that's through contemplative practices or deliberate experimentation. We encourage faculty to try new things,

for their own renewal as well as students' enhanced learning.

We know that faculty often learn best from each other. In that spirit, we encourage you to find ways to seek each other out, share your own stories and tips, and learn from your colleagues. Many of our hosted events aim to do exactly that. There are other ways faculty can spread their experiences, including writing an article for a future *Faculty Focus* issue, or offering to host a workshop on a teaching topic at our popular Teaching and Learning Days events, which occur once per month.

Speaking of our Teaching and Learning Days events, we have been expanding them in scope and size this year. We've been hosting larger-than-normal event closer in shape to a conference, with a few different concurrent breakout choices in each time slot. Also, we hope you'll join us on those conference days for complimentary pizza, salad, and subs from Publix. We are serious about building community among the full-time faculty!

On the subject of our teaching community, we are delighted to welcome two new colleagues to FCTL: Kirby Whittington and Erin Doggette have joined us as Instructional Specialists (with a STEM focus in Kirby's case). When you get a chance, please introduce yourself to Kirby and Erin! They, like everyone on the FCTL team, are excited to make your teaching more effective and less time-consuming.

We are continuing to experiment and expand our offerings, with slightly new variations of faculty learning communities and our popular Knighted Faculty Program, a yearlong investigation into teaching theories and practices, culminating with a badge and a credential acknowledging the achievement.

Part of our evolution was a new event at the end of the fall semester, the Holiday Retreat.

In place of the Winter Conference this year, we introduced a new, highly-orchestrated, intricately-planned event that aimed in equal parts to inform, educate, delight, entertain, and provide networking opportunities. This event was more of an experience than a conference, with faculty not only diving deep into one facet of teaching, but also enjoying the gamification elements along the way. The new format also allows us to reach a larger audience than the Winter Conference was historically able to attain.

You'll hear more about all these exciting events and programs from our biweekly listserv, and you can always find the information when you need it on our website: <http://fctl.ucf.edu/>.

As you see, we're charging into the new year with energy, enthusiasm, and optimism. Help us to help you, and let us know of any ways we can help improve your teaching experience. We're here for you!

Introducing Kirby Whittington Instructional Specialist



Kirby Whittington is a STEM Instructional Specialist with the Faculty Center. She has a PhD in Curriculum and Instruction with a focus in Science Education. She has taught both biology and education courses at the college level. She joined the Faculty Center in July 2022 after finishing a post-doc

focused on integrating engineering into middle school life science curriculum.

Greeting! My name is Kirby Whittington and I am the newest member of the Karen L. Smith Faculty Center for Teaching and Learning. I will be working as a STEM instructional specialist to assist faculty in course design, lesson design, assessment, etc. I have ten years of experience working at various levels of science education in multiple roles. Some of these roles include: a middle school science teacher, a college biology professor, lab instructor, and a science/math teacher educator. I graduated with my PhD in Curriculum and Instruction with a focus on science education from Florida State University. I also received a Masters of Science in Science Teaching for Community College and a Bachelors in Science both with an emphasis on Biology and Education. Prior to joining the team at the Faculty Center, I worked as a post-doctoral researcher at the University of Utah developing curriculum to integrate life science and engineering into middle school classrooms.

I strongly believe that the University of Central Florida plays a critical in preparing students for the world they will face outside of this institution and that the work that faculty do in instructing their students is pivotal. Therefore, I am passionate about helping faculty work to improve student learning in their classroom. At the Faculty Center, I provide workshops and lead programs to emphasize effective/responsive teaching strategies, understanding student learning, and teaching with technology.

I view learning as a collaboration between the instructor and the student and, therefore, learning occurs when students are interacting with the material they are being taught. This underpins my use of and championing for active and student-centered pedagogies within STEM classrooms. In my workshops and trainings, participants can expect to be involved in learning about strategies and discussing them but also beginning to utilize strategies in the context of their own courses.

I am an active member in the National Association of Research in Science Teaching and the American Educational Research Association. I view educational research across the disciplines as valuable to informing our understanding of student learning and pedagogical practices. I am excited about the prospect of continuing to build on my knowledge and practice with the faculty here at UCF.

Introducing Erin Doggette Instructional Specialist



Erin Doggette is the newest member of the Faculty Center for Teaching and Learning. She joins the team as an Instructional Specialist with a background in English Language Arts, Curriculum & Instruction, and nearly 15 years of teaching experience in secondary and postsecondary education.

It brings me great pleasure to introduce myself to my new UCF family. My name is Erin Doggette, and I am the newest addition to the Karen L. Smith Faculty Center for Teaching and Learning (FCTL). I offer FCTL nearly 15 combined years of education, leadership, administration, facilitation, and faculty development experience.

During my educational journey, I earned a PhD in Higher Education Administration with a focus on Leadership from Andrews University. My research explored diversity, equity, and inclusion and how these three elements specifically impact the higher education campus climate. I also earned an

Educational Specialist degree in Curriculum and Instruction from La Sierra University. Prior to earning my EdS, I earned a Master of Arts in English Language Arts & Secondary Education from the University of Alabama in Huntsville (UAH) as well as a Bachelor of Arts in English from UAH.

In addition to my formal education, I am a certified Inclusive Environment of Care facilitator through AdventHealth and Franklin Covey and hold certificates in Diversity, Equity, & Inclusion (USF), Change Management (MSI), Project Management Essentials (MSI), Exploring Strategies to Promote an Inclusive Learning Environment (VC), Linguistic Diversity and Antiracism (VC), and a whole host of other certifications.

Prior to serving in my current role at the FCTL, I was part of the Valencia College family. I worked as an instructor and was a facilitator trainee for the Peace and Justice Institute at Valencia College. I also served as an adjunct instructor at La Sierra University, AdventHealth University, Riverside City College, Mount San Jacinto Community College, and Houston Community College where I taught English Composition courses, Curriculum and Instruction courses, and a whole host of faculty development courses.

At the Faculty Center for Teaching and Learning, I will be offering faculty development workshops and leading teaching and learning programs on effective teaching strategies, curriculum and course design, inclusive classroom management techniques, teaching with technology, and facilitating faculty interdisciplinary learning communities. I will also be teaching Preparing Tomorrow's Faculty (IDS6513) within the UCF College of Graduate Studies, a UCF graduate course for Ph.D., Masters, and Post-Doctoral students, on effective teaching at the university level. In this course, we educate graduate students on teaching pedagogies, effective teaching methods, course design, student learning and motivation, assessment, classroom management, and career development. I serve as part of the senior staff team of the Faculty Center by collaborating to plan events and provide faculty support through consultations and workshops. I deliver training programs for graduate teaching assistants and associates and conduct classroom observation sessions for faculty members across disciplines.

My extensive education has proven to be invaluable and has positioned me to be a guide for learners ranging from grade six through the graduate level. I pride myself in being a lifelong learner with the awareness that my skills should be sharpened and improved every day. In each of my daily encounters and interactions, I find a learning opportunity. These opportunities then evolve into a chance for me to share what I have learned with others. I desire to see others reap the benefits of adopting a growth mindset akin to mine. As an educator of nearly 15

years, I became skilled at crafting innovative ways to engage learners, and I found myself becoming the “teaching strategy hub” for my colleagues.

My approach to learning is a student-centered pedagogical approach adopted from Vygotsky and Bruner. This approach shifts the focus of instruction from the teacher to the student. Its aim is to develop learner autonomy and independence by putting the responsibility for the learning path in the hands of students. Through purposeful scaffolding and guidance, this method employs the advantage of learners becoming more skilled at managing their own learning. They co-construct knowledge with their peers as well as the instructor. The role of the teacher is to create a safe, socially constructed, collaborative learning environment and facilitate student learning. Ultimately, learning is considered a process, not a product (Bruner, 1966). I am an active member of Peace and Justice Institute (Valencia College), the National Association of Diversity Officers in Higher Education, National Council for Teachers of English, National Education Association, Alabama Education Association, Phi Delta Kappa, National Alliance of Black School Educators, and the Professional and Organizational Development Network.



Parental Leave and the Tenure Clock: Time for a Cultural Shift

Lynn Becker, Lonny Butcher, Lauryn De George, Chris Leo, Amanda Main



Pictured left to right: Amanda Main, Lynn Becker, Chris Leo, Lonny Butcher, Lauryn De George, (co-authors) and Karen Ehrhart, all Department of Management.

Professor Mom?

Despite the increase in women scholars across all fields in academia, these faculty members are facing particular challenges far greater than their male counterparts in a key area of academic success: the choice between the biological clock and the tenure clock. A recent report has shed light on some disturbing statistics of those faculty members who have children: only 44% of women parents also have tenure, while 70% of the men parents do (AAUW, 2021). Regardless of how egalitarian one may hope to be in the division of caretaking tasks, some, such as pregnancy and the risks and complications associated with it, lactation, and postpartum health issues, are not gender neutral.

The Need for Culture Shift

There are few official policies in place for women faculty who are also mothers. The Family Medical Leave Act (FMLA) has provided eligible employees with 12 weeks of unpaid, job-protected leave for qualified family and medical reasons since 1993, and the Pregnancy Discrimination Act of 1978 amended Title VII of the Civil Rights Act of 1964 to include discrimination on the basis of pregnancy, childbirth, or related medical conditions as a form of sex discrimination. However, the tenure process that underpins academic career success does provide an indirect, though not intentional, loophole. For a policy that allows an individual a certain small window in which to accomplish relatively extraordinary tasks or be ter-

minated, it creates difficulty in that it coincides with the average childbearing years of women. In fact, 46% of women faculty in business, history, and computer science departments reported that parental leave policies influenced their decisions to accept a position compared to only 21% of their male colleagues (Morgan et al., 2021). Ironically, the most commonly used method of addressing this adverse impact was to offer tenure extensions for new parents—a move which increased the probability that male faculty would earn tenure, while decreasing it for women (Antecol, Bedard, & Stearns, 2016).

When the Queen Bee Stings

Given the inadequacy of policy in addressing the outcomes women faculty with caregiving responsibilities face, it is time for a radical culture shift, and it is one that may surprise many when considering the “victims” of the current system.

The Queen Bee Syndrome is a phenomenon in which highly successful women in masculine or competitive organizational settings tend to engage in behaviors that not only fail to help, but often actively hinder other women (Staines, Tarvis, & Jayaratne, 1973). And in fact, the extant literature demonstrates that queen bees are alive and well in the academy. A 2004 study (Ellemers et al., 2004) showed that female faculty rated female graduate students as less committed than their male counterparts (despite the students reporting the same level of commitment), and also described themselves with more masculine than feminine characteristics. Unfortunately when the study was replicated 15 years later, little had changed (Faniko, Ellemers, & Derks, 2020).

Track Like a Mommy, Sting Like a Bee

One of the ways in which the queen bee phenomenon has targeted women has been through the disparaging of women faculty who spend more time with their families and fewer hours on their careers as “mommy trackers” (Williams, 2000, p. 72). These women are perceived as less dedicated than their male counterparts; however, this is a perception which loses its legitimacy when one realizes that although men do engage in childcare tasks, women spend 75% more time doing so—a report echoed by both males and females (Gruber et al., 2021).

Distancing From the Monarchy

Lest there be any misunderstandings, this article assigns no blame to the women who fall prey to these patterns, and neither do the authors of the studies presented. The queen bee phenomenon is a consequence of the gender discrimination that has plagued academia for so long, not a cause of it. Even Carol Tavris, who coined the “Queen Bee” term, has expressed regret for going with “a catchy name” rather than fairly explaining the behavior of women trying to adapt to a male-dominated environment in which she must survive

(Khazan, 2017). Faniko et al (2020) suggest a shift to the term “self-group distancing” in order to better reflect the context.

Given that it is a cultural acceptance of bias that has caused the phenomenon, it is not women that need to be fixed. Instead, it is the existence of bias in organizations and the intentional steps each individual can do to combat it. For example, one intervention that has been demonstrated to eliminate self-group distancing behaviors is to simply ask women to recall a time when they have been judged based not on their gender, but by their merit. And an intervention that asks for empathy through positive self-reinforcement is an intervention we can all support. In sum, our call-to-action is a call to compassion.

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A Discussion-Based Approach for Improving Student Learning and Engagement in Online Education

Abdul-Akeem Sadiq



Abdul-Akeem Sadiq, Ph.D., is Professor in the School of Public Administration at UCF. He is also the Director of the Master of Public Administration and Master of Public Policy programs. His research focuses on community flood risk management, organizational disaster preparedness, mass fatality management, and collaborative governance. He has over a decade of teaching experience. His teaching interests include public administration, emergency management, homeland security, public policy, terrorism, and public safety.

Improving student learning and engaging in online classes remains a challenge. One of the strategies that I use to increase learning and engagement among online students is an online forum discussion on current issues in the news relating to the course. The discussion-based approach that I present here can be applied to online courses from various disciplines. For the purpose of illustration, I apply this approach to an online course in emergency management and homeland security (EMHS). Because it’s a discussion forum, online students can use it as a platform for engaging one another on current EMHS issues that are in the mainstream media; issues that affect them daily.

Current Issue in EMHS Discussion Forum

Purpose: The purpose of this discussion forum is to discuss current EMHS issues in the news and apply EMHS concepts to real world issues, as well as increase the level of student engagement in the course.

Learning Objectives: At the end of the discussion forum, students should be able to:

- Explain the complexity and challenges inherent in EMHS issues at the national, state, and local levels;
- Conduct research and analyze current EMHS issues;
- Develop the skills on how to present viewpoints in an objective and respectful manner;
- Develop the skills to engage with other students in an online environment.

Discussion Guidelines: Student groups consisting of 4-5 students will be responsible for posting and moderating a discussion forum titled, “Current Issues in EMHS Discussion Forum.” The instructor must approve the forum topic by Monday of the preceding week of the forum. After approval, the group responsible will post the forum topic by Monday at 8 am. Next, other students will post their own responses (minimum of 100 words) to the forum topic by Thursday at

11:59 pm. The moderating group will respond to all other students' postings by Friday 11:59 pm of the same week (this is when the forum closes).

All students must ensure that viewpoints are objective and respectful of others. If a posting is offensive, inappropriate, inadequate (e.g., not following guidelines), or late, points will be deducted. The forum will constitute 10% of the final grade. Each group submits a one-page document detailing each group member's contribution to the discussion forum by Friday 11:59 pm of the week of their forum. The instructor assigns grades based on the grading rubrics below.

Table 1. Grading rubric for the moderating group

<i>Criteria</i>	<i>Points (%)</i>
Relevance of the topic to EMHS	25
Level of engagement of class during forum	25
Use of objective and respective viewpoints	15
Use of appropriate grammar	15
Timely submission	20
Total	100

Table 2. Grading rubric for forum discussion questions

<i>Criteria</i>	<i>Pts (%)</i>
Strength and clarity of arguments	30
Minimum 100 words response per student	20
Use of objective and respective viewpoints	15
Use of appropriate grammar	15
Timely submission	20
Total	100

Below is an actual discussion forum, and the topics is "Government responsibility in the face of the Coronavirus"

Discussion Prompt: As of January 21, 2020, there are 14 confirmed cases of coronavirus in the United States. According to the CDC, "On January 30, 2020, the International Health Regulations Emergency Committee of the World Health Organization declared the outbreak a public health emergency". First detected in Wuhan City, Hubei Province, China, the virus has spread to 37 international locations - including the United States. Current cases within the U.S. have been attributed to travel, with only 2 of the 14 cases resulting from person to person contact.

Discussion Forum Questions

1. Following the January 30th classification, do you believe government officials have been proactive in taking actions that will help prevent the spread of the coronavirus in the United States?
2. Do you think that the Trump Administration's "2.5 billion supplemental budget request" is sufficient funding to combat the virus? (Politico, 2020)

3. Which level of government (federal, state, local) in the US is most likely to be effective in controlling the spread of coronavirus

Students also provide reference articles and videos (not shown due to space limitations).

This section discusses how learning was assessed. To ascertain whether the discussion forum improves students' learning and engagement in the course, I used three evaluation methods. First, I examined the student perception of instruction. What I found was that students' comments about the discussion forum were extremely positive. Some said it was one of their favorite assignments. Second, I examined the number of words per posting and found that almost all the postings were significantly over the minimum target, with many multiple follow-up postings beyond what was required. Lastly, I conducted a formal evaluation of the discussion forum using a survey embedded in the course. The 14 questions were adapted from the National Survey of Student Engagement (<https://nsse.indiana.edu/nsse/survey-instruments/index.html>). Due to space limitations, I will discuss two questions and their results. 1) There were several questions that focused on knowledge, skills, and personal development of students. Here is one example, "How much did this forum discussion contribute to your knowledge, skills, and personal development in the following area: thinking critically and analytically? Please, use the following scale: Very much, Quite a bit, Some, Very little." 2) The question used to measure engagement was: "On a scale of 1 (lowest) to 10 (highest), how would you rate the level of engagement of the Current EMHS Issue Forum Discussion? Engagement is defined as your involvement with the educationally relevant activities and conditions in this course that are instrumental to your learning." Out of the 31 students enrolled, 26 of them completed the survey (84%), and the survey took an average of 3 minutes and 20 seconds for completion. The results for the first question indicated that 100% of the student reported that the discussion forum contributed to their knowledge, skill, and personal development in terms of thinking critically and analytically, while the results of the second question showed that 92% of the students rated the level of engagement in the discussion forum as at least 7 (out of 10).

The results from the three assessments indicate that most of my students think the forum discussions were highly engaging and that their critical thinking and analytical skills improved subsequently. Future studies should measure the level of engagement using multiple questions and replicate this approach with a larger number of students. In sum, this article presents a discussion-based approach for improving student learning and engagement in online education.

Empowering and Motivating Undergraduate Students through Research Ideation and Implementation

Tingting Zhang



Tingting Zhang is Associate Professor in the Department of Hospitality Services where she teaches hospitality and tourism technologies and database management strategies. She chairs multiple honors undergraduate theses and works with undergraduate students in research projects and grants. She has been the recipient of

UCF Excellence in Research Award (2021) and Research Incentive Award (2021). Her main research interests are social media marketing, employee wellness, and digital mental health.

Mentoring undergraduate researchers to develop and implement research ideas is a rewarding experience. There are many noticeable benefits for both faculty mentors and undergraduate students if they engage in high-quality mentorship. For young researchers, the experience learning research methods and applying their knowledge and skills to solve practical problems increases their self-efficacy and self-confidence, which better prepares them for future career success and further post-graduate studies. The undergraduate research experience also develops young researchers with a competitive edge compared with their peers in terms of applying for graduate schools. For faculty mentors, the mentorship experience produces valuable scholarship.

Since joining UCF as faculty at Rosen College of Hospitality Management, I have been closely working with many undergraduate students. UCF offers many resources for students to engage in research with faculties, such as research course credits (Directed Research course 4912), Honors Undergraduate Thesis Program, and Summer Off Campus Research, to name a few. Additionally, UCF hosts Student Scholar Symposium every year and publishes undergraduate research works in *The Pegasus Review*, both of which implement a scientific peer-review process. For faculties looking for undergraduate researchers, UCF allows submitting a posting of undergraduate research assistant hires at the Undergraduate Research Positions Database.

However, due to the lack of research skills and prior experiences in participating in research projects, undergraduate students usually need relatively more help from the faculty mentors, in terms of research guidance and motivation. Furthermore, research looks mysterious to undergraduate students who lack experiences, sometimes resulting in their hesitation to start to do research and/or propose research ideas. I have found some strategies effective in guiding young researchers

to start research and implement quality research projects. The following paragraphs provide details, including trust building, facilitating motivation, and empowering students by recognizing and providing feedback to their ideas. Some technical tools are also discussed below that help me effectively work with undergraduate researchers.

Three principals I follow in mentorship are availability, active listening, and analysis. I usually schedule weekly meetings with my undergraduate researchers to review their progress, provide feedback, and help solve problems they encounter in research. When my students present their ideas and research progress, I will be quiet and attentive without interrupting their presentations. After their presentation, I provide structured feedback by following this sequence: current situations, positive points that should be kept, and the parts that need adjustment and further improvement. Furthermore, I provide sample articles for them to reference in further enhancing their writing and research methods. Every meeting before discussing research with my students, I always spend some time asking about their recent happenings, their classwork, and their lives, to let them feel that we are working as peers, friends, and colleagues, thus building trust with each other. With genuine trust between students and faculty mentors, the collaborative research work can be effective and smoothly communicated and implemented. I create shared folders with my students for transparency and easy communications during research projects.

Building trust and rapport with students is a most powerful influence on motivation and empowerment. Being approachable, respectful, and friendly is crucial in increasing students' intrinsic and extrinsic motivations. Additionally, understanding students' personal goals and unique individual experiences is a very effective approach in allowing students to find their research interests and ideas. At the first meeting with my students, I always ask them to freely talk about their past experiences including internships to get a better understanding of them. I guide them to reflect on their past experiences from the perspective of research ideation and design. I make every effort to get to know my undergraduate researchers as individuals and convey genuine interest and concern about their lives. Informal conversations help a lot to allow students to express their emotions and specific challenges or strengths freely and safely through learning and research activities. To facilitate their motivations in research, I always present a short slide deck about searching and reading literature in steps. Because most undergraduate students have never read an academic paper, this offers them clear instruction to identify the literature they need. Furthermore, I specifically show them a general structure of a typical academic paper and ask them to carefully read the future-research directions section. This section usually introduces many inspiring ideas for future research endeavors.

I believe that a good mentor should consider students' "zones of proximal development." Therefore, I usually scaffold tasks for my students to enhance development and provide clear expected outcomes for different stages of research activities. In this way, students feel empowered while learning their limits and capabilities. Critical thinking and problem-solving abilities are important for researchers. During meetings when I explain some methodological issues to solve, I always have short pauses and give students the space to think and contribute their ideas to solving the problems. To this end, students are able to increase mastery in active problem solving and feelings of competence, which in turn improves the overall elevation in the quality of research output.

Lastly, I would like to highlight the importance of mentors' reflection. I frequently reflect on my mentor experiences with undergraduate students to find any parts that can be further improved. I keep notes of my reflections in order to keep track of the adjustments I have made in the mentorship journey. I see mentoring undergraduate students as an opportunity to foster lifelong learning with young researchers and better prepare them for further advancement of studies and career.

The following three articles by Ann Miller, Martha Hubertz, and Sharon Woodill are a set addressing the topic of Civil Pedagogy

Civil Pedagogy: The Importance of Dialogue and Disagreement Ann Miller



Ann Neville Miller is Professor in the Nicholson School of Communication and Media. Ann currently serves as the Assistant Director of Faculty and Staff Relations in NSCM. Her research interests center on instructional and health communication.

Students come to our classes with an increasingly rich diversity of experiences, backgrounds, and identities. As a result, they will inevitably interact with people who have different perspectives than their own. One of our key roles as educators in this cultural moment is to create a climate in which such encounters can occur in the spirit of dialogue and mutual respect.

Accomplishing that goal will not be easy. National surveys indicate that a large proportion of students from all ideological and demographic backgrounds feel uncomfortable at times sharing their opinions about controversial issues. Others believe that engaging with bad ideas risks empowering them

(Abrams & Khalid, 2020). Nevertheless, decades of research in the social sciences suggest that by eliciting a range of perspectives from our classes and encouraging our students to listen to people and ideas they may view as wrong, or even morally offensive, we can offer them three valuable opportunities (OpenMind, n.d.).

1. **The opportunity to discover that their perspectives are incomplete or incorrect.** Evidence from research in social psychology makes it clear humans are inclined to all sorts of cognitive biases when exposed to opinions that are different from their own. Our minds are hard wired to protect ourselves from threats not only to our physical safety, but also our ideological safety. Every one of us engages in confirmation bias (Nickerson, 1998) and motivated reasoning (Kunda, 1990), and develops inaccurate stereotypes and attributions (Eberhardt, 2020). The human tendency is to think others are irrational, stubborn, or hypocritical while we think of ourselves as being virtuous and rational (Pronin, Lin, & Ross, 2002). One of the best ways for our students to counter these cognitive distortions and come to truth is to allow their beliefs to be challenged by people whose cognitive biases are in the opposite direction to their own.
2. **The opportunity to discover more effective solutions to their concerns, even if their original perspectives were correct.** When groups expose themselves to minority viewpoints, it stimulates divergent thinking. Even if minority viewpoints are wrong, such groups arrive at qualitatively better solutions than groups that only hear majority opinions (Nemeth & Kwan, 1987). Understanding oppositional views enables strategizing that takes into account the perspectives and needs of multiple audiences. The alternative is "groupthink" (Janis, 1982), in which people reach premature and inaccurate consensus because opposing viewpoints have either been sidelined or not solicited, and disastrous consequences ensue.
3. **The opportunity to cultivate a range of personal and civic virtues.** Maintaining a free and democratic society requires cultivation of the virtues of open mindedness and intellectual humility. Research indicates admitting we might be wrong can improve our decision-making, relationships, and happiness (Blackwell, Trzesniewski, & Dweck, 2007). As Crutcher (2020) argued in his open presidential letter to the University of Richmond, when we facilitate an environment in which students can listen respectfully to people who challenge their beliefs and who represent causes with which they do not agree, those virtues are strengthened.

Literature about dialogue provides some guidance about

conditions that must be present for this equality and mutual respect in interaction to occur (Gordon, 2006). It suggests that we should design our pedagogy to promote classroom climate characterized by: a) unconditional positive regard (students respecting each other for their intrinsic value as human beings); b) empathy (suspending their own points of view and trying to imagine how things might seem from other perspectives); c) genuineness as opposed to manipulation (not discussing with the aim of scoring a rhetorical victory or invoking blame or shame); d) mutual equality and cooperation (working together on equal footing); e) imagination (innovating new thought together across disagreement); and f) vulnerability (being open to being wrong; being intellectually humble).

The pedagogical tools described in the following section approach the challenge from a range of directions. They've all been tested by UCF faculty and we hope one or more of them will resonate with other faculty. Also check out the Faculty Center webpage about civil pedagogy at <https://fctl.ucf.edu/teaching-resources/classroom-management/civil-pedagogy/>

The chance to understand why others think differently than they do—to recognize that there are “reasonable people of goodwill who do not share their most fundamental convictions” (George & West, 2017, par. 3)—is a gift we can give our students. As Robert George and Cornell West (2017), academics from opposite sides of the ideological spectrum, jointly argue:

None of us is infallible. This does not mean that all opinions are equally valid or that all speakers are equally worth listening to. It certainly does not mean there is no truth to be discovered. Nor does it mean that you are necessarily wrong. But they are not necessarily wrong either. (par. 4)

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Using the Canvas Discussion Tool for Online Debates Martha Hubertz



Martha Hubertz is a social psychologist and Lecturer in the Psychology Department. She teaches social psychology and several diversity courses as well as research methods. In 2019 and 2020, she was selected to participate in the Pegasus Innovation Lab (iLab) Digital Course Redesign Initiative (CRI). Dr. Hubertz has been recognized on numerous occasions for her innovative approaches to teaching. These recognitions include: Teaching Incentive Program Award (2021), the Chuck D. Dziuban Award for Excellence in Online Teaching (2020), and the Rick Schell Award for Writing Across the Curriculum (2019).

John Stuart Mill once said that we can “take something from both sides of the great controversies and make out that neither extreme is right, nor wholly wrong.” This is true not only in philosophical discussions, but also scientific ones. In this time of promoting civil discussions on what might be sensitive topics, Mill’s arguments on free speech are especially relevant in our classes.

I've found a good resource for selecting topics for assignments about controversial issues is McGraw Hill's "Taking Sides: Clashing Views" series. These books are organized by academic discipline, and are based on the idea that having students engage in debates can be a great teaching tool for critical thinking. It also helps students discriminate between scientific arguments and pseudo-science, between research and propaganda. Each book contains a range of controversial topics with brief arguments by scholars in the discipline for both sides. I cull topics from relevant books in the series and use them for the basis of a debate assignment in my online classes, using the Discussion tool in Canvas to host the debates.

In general, students are less than thrilled to complete traditional discussion posts. (Search "discussion post memes" and there are thousands of "great post" jokes.) So I handle the debate assignment differently than the average discussion. For example, I have students self-divide into "pro" or "con" on controversial topics in the field in an initial post. Once students pick a side, they need to find a peer-reviewed article to support their initial stance. This way, students get the secondary benefit of learning to find peer-reviewed research, summarize articles, write in APA format, and think critically about topics. (Fortunately, students merely think they are engaging in a debate). I also allow students to skip one discussion if they don't like the topic or are just really busy that week.

All of these tweaks seem to work well in my classes. Students overwhelmingly indicate they like the debates (over 80% responded to a poll that they liked them a great deal or liked them somewhat). I also get feedback that the structure helps them think critically about various topics; and form arguments based on research, not emotion; and learn APA format.

The "Taking Sides: Clashing Views" series has been around for many years, and includes topic areas including economics, U.S. history, global politics, business ethnics, gender, education, media, and many more. I recommend it as a great way to build debates. I have had assigned debates about a range of topics, from whether we should believe eye-witnesses to whether men and women's communication differences are primarily a function of power differentials. With clear discussion guidelines, students are almost uniformly polite and respectful, and they seem to internalize Mill's lesson that on almost every issue, "neither extreme is right, nor wholly wrong."

IDS and Civil Pedagogy

Sharon Woodill



Sharon Woodill is an interdisciplinary scholar with a Ph.D. in Interdisciplinary Studies (philosophy and religious studies), an M.A. in Gender and Women's Studies, and a B.A. in Music (jazz-piano). Her research focuses on interdisciplinary methodologies, feminist science studies, and religion, gender, and sexualities. She teaches in the Interdisciplinary Studies Program in the College of Undergraduate Studies

Interdisciplinary Studies (IDS) focuses on addressing real-world complex problems such as those at the heart of most controversial subjects that garner public debate. Topics such as climate change, gun control, or abortion are all complex problems as they involve multiple overlapping and interacting variables. Such issues are dynamic and unpredictable and rarely solved by simple solutions. In its capacity to address complexity, IDS offers some helpful tools for engagement at the personal level as well as academic. Indeed, teaching interdisciplinarity requires civil pedagogy.

IDS has three core competencies: perspective taking, critical thinking, and integration. For my students, I translate these as simply: how we see, how we think, and how we do. These competencies are not unique to interdisciplinarity; however, IDS is content agnostic, meaning that there is no specific set of information that must be transferred as is the case with traditional disciplines. Therefore, IDS centers on process, and, ideally, emphasizes development of the cognitive toolkit essential to addressing complex topics and issues.

The interdisciplinary cognitive toolkit consists of a collection of values and skills necessary for facilitating the core competencies. To become a good perspective taker, one needs to develop empathy. Empathy is often associated with an emotional orientation to another, but within IDS, this is more helpfully understood as a cognitive orientation towards another. It is an intentional suspension of judgment while asking what hosts of variables were in play that contributed to why a person made the choice that they made at a specific place and time. To help students develop this practice, I may choose a news article from a local source about an event involving multiple people, and, in groups, ask students to adopt the position of the different characters within the news story. They then have to role play by constructing a character profile, and from that perspective, respond to my questioning which is designed to unpack dominant narratives and hidden assumptions underpinning the news article. The objective of this activity is to encourage students to develop a rationale for the behavior of each person involved rather than to simply

pass judgment as to which party is right or wrong. In this process, students are exposed to multiple perspectives as they negotiate their own reactions to the different points of view they encounter. This is only one activity in a suite of activities designed to cultivate perspective taking.

Along with empathy, the IDS cognitive toolkit consists of such things as open-mindedness, intellectual courage, and tolerance of uncertainty and ambiguity. Open-mindedness is often construed as a willingness to consider different points of view, but I push my students to go further and to embrace open-mindedness as the willingness to be moved by different points of view. They are asked to find value in different points of view, even when, or especially when, they disagree. Open-mindedness is the bedrock of critical thinking as it provides access to a set of possibilities that are reduced or eliminated in the presence of certainty and absolutism. In other words, they are asked to practice civil discourse.

In my class, students are routinely required to create a series of podcasts. This seems more effective than traditional discussion boards in getting students to open up and engage more substantively with different ideas. Students are provided a reading and a series of prompts that require them to address the content of the reading, assert their own perspectives, articulate a different perspective, and engage each other's points of view. Assessment is based on engagement. Did they share ideas, challenge ideas, and affirm different points of view? The objective is not for students to change each other's minds. The podcast is not a debate. The objective is for students to develop a relationship as peers in which they allow space for each other's different ways of seeing and knowing. By developing capacity in this context, students will be better equipped to transfer this experience into contexts in which they, as interdisciplinarians and global citizens, can apply these tools to real world complex issues and conversations in their everyday personal and professional lives.

The IDS cognitive toolkit is necessary for doing good interdisciplinary work, but more importantly, it is also necessary for doing good in the world, I would argue. Empathy, open-mindedness, humility, and courage are essential to fostering vibrant diversity, and my primary teaching tool is to model these values in every aspect of my life. In my mind, there is no division between the personal and professional, and my goal is to live an interdisciplinary life that centers these skills and values as personal practices of diversity and inclusion. I seek to embody these values in the interactions with those in my family, my community, and my classroom. In so doing, the goal is not to "win" the debate or conquer the conversation—this amounts to a practice of power and domination that holds little interest to me. I simply seek to cultivate space for others to think and be their unique and authentic selves, and in so doing, I cling to a bit of faith in the belief that this might, in

some small way, have a positive impact on my students and our world(s).

Reflections on Study Abroad

Sandra Sousa



Sandra Sousa is Associate Professor in the Modern Languages and Literatures Department, where she teaches Portuguese language, Lusophone and Latin American Studies. Her research interests include colonialism and post-colonialism; Portuguese colonial literature; race relations in Mozambique; war, dictatorship and violence in contemporary Portuguese and Luso-African literature; and feminine writing in Portuguese, Brazilian and African literature.

"I had never branched out like this before, and my nerves were at an all time high." This comment, by one of the UCF students that took my study abroad to Portugal this past summer, partially reflects my own experience every time I have embarked on a study abroad experience as faculty. My nerves are also high due to the responsibility that it is to take a group of students to a country that is my own but which they don't know anything about. If something goes wrong, how would I deal with it? Luckily, it has been my fourth experience, and nothing went in the wrong direction.

At the time of this writing, it has been three months since I spent a whole month in Portugal with students, and I just gathered the strength to read my students' reflections on their experience studying abroad. I believe that I was avoiding it because of the hardships I always go through to make a study abroad program run at UCF. It is my belief that study abroad programs are one of the most important parts of student academic life. Being a foreign faculty, this belief is deeply engrained in the way I look at academic programs in general. It has been a mystery to me, since I arrived at UCF, how few students enroll in study abroad programs. For instance, in the 2018-2019 academic year, less than one percent of students participated in study abroad programs. The benefits of studying abroad are innumerable—ranging from broadening academic worldviews to becoming more adaptable, exploring other interests, to making oneself more marketable, etc.—and it surprises (frustrates!) me that the investment of a university such as ours on the internationalization of its students is so low.

Seeing it from a European perspective—and this can be a sensitive point—it is common to believe that Americans in general know so little about the rest of the world. I always

try to combat this perspective every time I go back to my country. Nonetheless, reading my students' reflections, I was disturbed to read that after their study abroad experience, they have come to realize exactly that: their lack of knowledge of other cultures and languages. One student specifically wrote, "There's so much history that has occurred around the world that as an American I have never been taught or exposed to. I see this as a turning point for my interest in not just history but world history specifically countries that I have no prior knowledge."

It might be a cliché to say that study abroad really has a positive impact in students' lives, that it changes them inside and makes them look at the world and themselves in a different way, but it also is the reality. Reading their words about their experiences confirms just this: "Looking back now, I am so happy that I pushed myself out of my comfort zone because I think it's necessary to make any real progress"; "I felt a new sense of independence and freedom I have never experience[d] before, and it felt amazing"; "This growth was very exciting for me because I felt so much more confident in my ability to live alone and create my own experiences"; "I must say it has given me a sense of accomplishment"; "My time in Portugal was definitely a once-in-a-lifetime experience that I am so grateful for and will cherish forever"; "I leave Portugal and Europe a richer person, hoping to use my experiences in the past month as I move through life"; "I feel that my life has been changed by my time in this program." This list could go on, but just a few examples show how transformative an experience abroad can be.

For those who might still have doubts and think that studying abroad is nothing less than a monthly vacation, I would like to counter those thoughts. Students still have classes for which they have to study, read, and prepare assignments. They are long classes, but they enjoy them: "Three hours twice a week for a class, I did not think we would made the three hours every class, but I felt like three hours was never enough." They also participate in cultural visits: "The class trips we took to some amazing monuments, castles, and museums taught me a lot"; "The course that I took really opened my eyes to aspects of the country of Portugal that I had not considered before"; "I was provided the space and opportunity to view Portuguese society and culture through a different lens."

Experiencing a new culture definitely plays a big role in changing students' perspectives, not only of the world per se, but also of their own culture and the place they occupy in it: "I also got to see how life in my own country varies from place to place. It makes sense that their everyday experiences, in places distant from my home state of Massachusetts as Florida or California, would be quite different from mine in some respects. It was a fascinating and unexpected cultural interaction to relate our different realities living in the

same country"; "Doing this presentation was my favorite presentation that I have ever done."

A last comment that I would like to leave here regarding this type of experience for students is the part of personal contacts and interactions, the sense of being able to form a new friendships abroad, new families, where the feeling of fear of being alone disappears. In other words, the knowledge that they are capable of creating relationships no matter where they go and how meeting different people can help their personal growth: "Within our group we had so many different people all brought together that also helped me personally with learning new things"; "The people that I've met while there have taught me a lot, both about the world, and myself"; "I will return to the US not only with more knowledge about Portugal but also with new human connections; friendships that I will hold dear and will accompany me gracefully."

It is my hope that UCF begins to invest more in its students by facilitating the costs of study abroad programs, so we don't have to read the sad reality of students: "I didn't think it was possible for me." It is one of the most enriching experiences that we can offer to our students. No one gets immune to it. Not even the professors who spend a month sharing with them their countries and their lives. As one student wrote: "With tears of joy and sadness, I say goodbye to Lisbon... for now."

Fostering Noncognitive Skills for Success Rachid Ait Maalem Lahcen



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Students' perceptions about the relevance of certain subjects can shape their attitudes and behaviors, as a result, affecting their performances in those subjects. I frequently find when I have discussions with students who lack progress in a course that their perceptions affected how they approached that course. Therefore, I incorporate in the course design different ideas that focus on metacognitive skills. I'm sharing here some of those thoughts.

I discuss in different parts of the course the difference between growth mindset and fixed mindset, encouraging the students to work on having (or keeping) a growth mindset when it comes to mathematics. Having a growth mindset means to merely believe that ones abilities can be developed through dedication and effort, and abilities aren't inherently inflexible.

A student most likely exercises growth mindset in some areas and may decide based on previous experiences to adopt a fixed mindset when faced with a challenge. Mathematics can be challenging, yet embracing a growth mindset helps to see that a challenge is just an opportunity to become better. An example for students to avoid a fixed mindset is, when they become frustrated, to switch to another task, to re-examine study strategies, or to seek help.

I incorporate some of the techniques from the “flipping the classroom” model because students need to prepare before class to benefit from the lecture. One part can be an assignment in which they read a textbook or watch a video and answer a few questions. Another part is to give a proficiency quiz on vital skills. Of course, having a detailed course schedule attached to the syllabus or posted in the learning management system gives direct feedback to where they stand in the course.

I emphasize the value of attending class. Obviously, knowing what happened in class isn’t the same as not knowing. It enhances their studying, often reducing their study time, or sometimes giving them hints about the exams. The question should be, “Will the attitude of not going to class negatively affect something in the future?” Perhaps Steve Jobs from his speech at Stanford University in 2005 can assist. He said, “You can’t connect the dots looking forward, you can only connect them looking backward. So, you have to trust that the dots will somehow connect in your future.” He took courses like calligraphy that didn’t have practical application to his life when he took them.

If one of the top actions that students can do during class meetings is to take neat notes, we ought to remind them to minimize distractions during those meetings and communicate with them tips on notetaking. Likewise, the Student Academic Resource Center provides one-on-one coaching and workshops for the students to develop notetaking skills (and other essential academic skills). We can also communicate other campus resources such as Ask a Librarian, the University Writing Center, UCF CARES, Student Accessibility Services, Academic Advising, Adaptive and Inclusive Recreation, All-Knight Study, etc.

Since we expect students to build knowledge, we should learn about their prior knowledge and put strategies like “Just in Time Review” for remediation. Mathematics is conceptualized, and using diagnostic tests can inform students and instructors about prior foundational concepts thus allowing us to make recommendations. For the student, a growth mindset begins investigating how much algebra is needed to be successful at the university. If algebraic prior knowledge isn’t correct, it can hinder their progress. So, I share with them common mistakes and request that they keep track of their own mistakes. The

latter are a natural part of the learning process and when errors occur, we use them to learn, and when we track their frequency or classify them (conceptual, computational, lack of attention, etc.), we are trying to lower that frequency. This task can be done through self-reflections.

A student said, “I studied all night to the morning, and I still failed this exam.” I sensed that the student wanted to say, “It’s not fair.” But the student recognized the dilemma when I explained that cramming doesn’t work, and retrieving knowledge is tougher for a fatigued brain. The intention is to pursue spaced practice and act in advance. Only spacing study with repetition can improve retention of knowledge. To facilitate spaced repetition, a course should have more than one assignment during the week, repeating important concepts over multiple assignments, and forecasting crucial concepts that appear at the end of the course early enough in the term. This conversation brings two points: (1) What type of flexibility is in the course for the student to recover the grade? (2) What does a student need to do to bounce back if faced with disappointment?

We can’t overlook emphasizing the social aspect or the benefit of working with others, as it can help students develop their teamwork skills for the workplace. Students can learn from each other. They might share same majors and interests. They aren’t supposed to navigate the journey on their own, so they need to engage with their professors, their teaching assistants, and classmates. Being an independent learner is a plus, but they don’t need to try to learn everything on their own. A professor can support with facilitating discussions, collaborations, and peer evaluations.

“Shortcuts aren’t everywhere.” It’s obvious but necessary to say. While some methods are simpler than others or faster because of shortcuts, it doesn’t mean that one should always seek shortcuts. That’s not a trait of a growth mindset. Charles Issawi, economist and historian at Harvard, said, “A shortcut is the *longest* distance between two points.” Moreover, looking at this experiment, <https://www.youtube.com/embed/0nssTS3yen0?feature=oembed>, the shortest path isn’t always the fastest.

Finally, the focus on metacognitive skills supports cognitive skills, and it is effective if it’s authentic, uses good intervention techniques, involves students in the language that can make a difference, and it’s a straightforward campaign.

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Modern Training and Development in Organizations

Lauryn De George and Lynn Becker



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Your 3 pm Zoom training session did not go as you had hoped. You closed the session with an ill feeling in your stomach. A few of the participants seemed eager to participate, but many others appeared bored, some apprehensive of the remote training environment, and a few in the group just did not seem to take the session seriously. You now sit alone wondering what went wrong. You put in your best effort, but yet the outcome was discouraging.

If this sounds familiar, you are not alone. We feel your pain. At the onset of the 2020 world-wide pandemic, university faculty across the country experienced a near overnight transition from the traditional face-to-face classroom to an unknown remote learning environment. Many faculty embraced this challenging time as an opportunity for experimentation and professional growth. However, this transition was not without its challenges, frustrations, and yes, quite a few awkward remote class sessions. Although transitioning to a remote environment had its ups and downs, it was nonetheless a significant accomplishment for an industry steeped in tradition and known for adapting to change at a glacial pace.

The pandemic was the unforeseen catalyst that propelled higher education, as well as an unlimited number of other industries, into a remote learning and working environment. And while it is uncertain when and how this pandemic will end, we propose it is unlikely that organizational life will ever return to its pre-pandemic status quo. Expectations have been permanently altered. And perhaps rightly so. Albeit involuntarily, the potential benefits of a remote environment have been exposed. The use of technology to enhance learning

environments, and in a variety of settings, is here to stay.

In the following, we will share lessons learned, tips if you will, for creating an effective and engaging remote learning environment whether it be for students or employees, synchronous or asynchronous. We suggest that many of the same strategies for enhancing student engagement and learning in a remote classroom may also be successfully applied in organizational training and development programs. As expectations have changed, we must adapt. In fact, we argue that organizations who do not adapt will not only be viewed by stakeholders as less competitive, but that they will be seen as dinosaurs in the modern world.

To help equip training and development professionals to meet today's and tomorrow's remote learning challenges, we recommend five tips: Organize It, Chunk It, Personalize It, Gamify It, and Multimedia It. These have been practiced, and dare we say perfected, in the battlefields of higher education.

Tip 1: Organize It

In a traditional face-to-face training session, a puzzled look on a participant's face or a raised hand is the signal that a participant is confused, and additional clarification or assistance is needed. A remote environment does not afford this luxury. Therefore, greater preparation and skill, in terms of overall course organization and structure, is a must. When designing a remote training and development program, it is helpful to consider the following questions from the learner's perspective. Is the course visually well-organized and attractive? Is the learner's path through the course easily navigated? Is it clear what assignments should be completed and their corresponding deadlines? Is it clear how each lesson is linked to the learner's professional development goals or career progression?

Organization and structure of course materials are important for learning effectiveness, whether the environment be face-to-face or remote. However, there is an increased potential for miscommunication in a remote setting and every effort must be made in the course design itself to reduce this potential barrier to learning. We are not in any way implying that there is one best way to organize a remote training course. Course content may be organized by topic, chronology order, or even in a buffet-type style. The point is that the learner must be able to painlessly and independently navigate the course. Additionally, it is important to emphasize the role of training as providing, or enhancing, needed job-related skills. Training should never be viewed as simply another hoop to jump through. Each lesson, regardless of the organization method used (topic, chronological order, buffet-type style, etc.), should clearly indicate a link to the participant's professional

development goals demonstrating the value of the training to the participant.

Tip 2: Chunk It

It has never been more important to think outside the box, or to simply just throw the box away. Gone are the days of long, monotonous one-way lectures, and gone are the days of voluminous training manuals. As noted by McNamera, these learning methods are more likely to “lull adults into a stupor, rather than sustain sufficient interest and engagement to accomplish sustained learning ...” Instead, consider presenting information in chunks or bursts; a less-is-more approach. The key with chunking is to break larger amounts of information into smaller units and then identify patterns or themes in the information. These smaller units of information grouped by patterns or themes may then be presented as chunks, manageable bytes, of information. As a learning strategy, chunking reduces cognitive load and makes processing information easier.

In a 2020 *Harvard Business Review* article, Reidl and Woolley suggest that communication bursts “help focus the mind and declutter communications.” If need be, supplemental information may be provided and clearly noted as such. Providing supplemental information, and labeling it as such, has the benefit of allowing those that are interested in delving deeper to do so, while still focusing learners on the most critical information.

Tip 3: Personalize It

At the risk of sounding like snowflakes, we would suggest that training programs should be personalized to best meet the affiliation and camaraderie needs of participants. Let’s face it; there is no longer a water cooler, and this has left many employees longing for human interaction. Employee needs of camaraderie and affiliation are often fulfilled in an organic manner in a face-to-face environment. Examples of spontaneous bonding activities abound in a face-to-face environment (casual conversations with peers may turn into a chat over coffee, grabbing a quick bite to eat with coworkers during a lunch break, etc.) In a remote environment, affiliation and camaraderie needs may go unmet if not directly addressed in the design of the training and development program.

We recommend embedding multiple, and varying types of opportunities for interaction with the course content as well as other participants. Typically, the focus is on the learner’s engagement with the course content and learning materials. This is of course critical; however, we are suggesting that engagement of the learner with the trainer, and engagement of the learner with fellow coworkers should also be a priority to better meet the affiliation needs of employees.

Activities designed to increase engagement may take many forms and should be tailored to the target audience. Some examples may include live chat rooms, asynchronous discussion boards, trainer welcome videos, participant introductory videos, coworker feedback on submissions, and Zoom or other teleconferencing technologies. If the number of participants is large, the use of break-out rooms in Zoom to create smaller sub-groups may be highly effective. This strategy has the advantage of allowing the trainer to interact with a smaller group of participants creating a more intimate environment. Additionally, the use of break-out rooms not only creates greater opportunity for one-on-one interaction between the trainer and learner, but also between the learners themselves.

Tip 4: Gamify It

Games are not just for the young! Gamification may be used as an effective tool in achieving training and development goals. Glass explains (2017) in *Why Gaming Matters* that games encourage learners “to stay in the flow by tapping into ... human emotion,” that they “provide a safe space for trial and error,” and that “the benefits of using games to educate, engage and boost employee learning have become increasingly pronounced.”

Two examples of gamification applications that encourage participation are Kahoot and Materia. Kahoot is a popular learning tool in which participants can work individually or in teams to answer questions. Kahoot also has the advantage of being able to be implemented in a synchronous or asynchronous environment. Wang and Tahir in *Computers and Education* (2020) highlighted that Kahoot has a positive effect on learning performance. With over 50% of U.S. teachers currently using Kahoot, this tool has proven to stimulate engagement through a time-limited question and answer competitive format. A similar gamification learning platform is Materia. Materia, originally developed for the academic environment and currently used at the University of Central Florida, makes online learning richer and increases student engagement. This gamification option offers matching, flash cards, crossword puzzles, situational scenarios, and Jeopardy-type games to test user’s knowledge. In an organizational setting, these gamification options appeal to the competitive nature of employees and may also be effective in stimulating team cohesiveness. Similar gamification options may be available at other institutions as well.

Tip 5: Multimedia It

YouTube, Instagram, Twitter, LinkedIn Learning, TikTok and more: if you can’t fight them, you might as well join them. Embrace multimedia and use it to your benefit. Think of multimedia as another tool in your training toolbox. Combining multimedia alongside more traditional tools has

the potential to be highly effective as it approaches learning from multiple avenues; specifically, the use of multimedia in course design appeals to both audio and visual learners.

We suggest creating a short introductory/welcome video (1-2 minutes) to be viewed at the start of the training program as well as other brief videos throughout the course to deliver important information. A welcome video from the training facilitator adds a personal touch and starts the training program off with a positive tone. Videos, especially those led by managers and others in leadership roles, are a useful way to signal the importance of the training and its role in supporting overall organizational goals. Enlist organizational members in the creation of videos. Have a manager lead a training topic or consider enlisting a community leader for additional emphasis. Even better, have employees role play a training topic or discuss an important skill. Used as touchpoints throughout the year, videos excel at delivering foundational material that will be built on during the year. These types of videos also have the advantage of personalizing larger organizations and giving employees direct face-time with managers.

Collectively, these five tips (Organize It, Chunk It, Personalize It, Gamify It, and Multimedia It) were lessons learned, through trial and error, in higher education's overnight transition to a remote learning environment. We share these tips with confidence that they are applicable and valuable in the design of not only remote training and development programs, but face-to-face training as well. And while we may long for the good ol' days, returning to pre-pandemic status quo is unlikely. The use of technology to enhance learning environments is here to stay. The challenge is now how to best use these tools to our advantage.

Following on the adjacent column is a summary table of our tips:

Creating Effective and Engaging Remote Training & Development Programs

Tip	In-action
Tip 1 Organize It	Make the learner's path through the training program easy to navigate and link lessons to the learner's professional development goals <ul style="list-style-type: none"> • Organize content by topic, chronological order, or even buffet-type style • Clearly link content to participant's professional development goals or career progression
Tip 2 Chunk It	Break larger amounts of information into smaller, more manageable units <ul style="list-style-type: none"> • Group manageable bytes of information by patterns or themes thereby reducing cognitive load
Tip 3 Personalize It	Embed varying, and multiple types of opportunities for interaction <ul style="list-style-type: none"> • Encourage interaction of trainee with learning materials • Encourage interaction of trainee with trainer • Encourage interaction of trainee with other trainees
Tip 4 Gamify It	Use games to provide a safe space for trial and error <ul style="list-style-type: none"> • Appeal to the competitive nature of employees and build team cohesiveness
Tip 5 Multimedia It	Embrace multimedia and think of it as another tool in your training toolbox to be used alongside more traditional methods <ul style="list-style-type: none"> • Consider creative uses for YouTube, Instagram, Twitter, LinkedIn Learning, TikTok, etc. • Appeal to both audio and visual learners

The Use of Free JoVE Educational Resources to Improve Instruction for Underserved Students

Shahram Ghiasinejad



Shahram Ghiasinejad is Associate Lecturer in the Psychology Department. He holds a B.A. in Computer Science from the University of Texas at Austin, and an M.S. and a Ph.D. in Cognition and Neuroscience from the University of Texas at Dallas. His research interests are broadly concerned with understanding human language comprehension through a combination of experimental and computational modeling approaches.

The demand for remote instruction has been on the rise in recent years. The Covid-19 pandemic accelerated this trend significantly. While all students faced enormous challenges in switching to remote learning almost overnight, the impact of the pandemic was more severe for underserved students. Not only did they face the challenge of moving to fully remote learning, but they also lacked the skills and resources needed to be successful in an online learning environment. To keep up with the demand and to ensure the quality and effectiveness of remote instruction, educators and technology companies have worked together to develop products that engage and support students in an online environment, especially students with limited resources and skills to learn successfully online.

One such product with a successful track record is the JoVE Science Education Resource. UCF initially purchased a one-year subscription to JoVE resources that started in the fall semester of 2020, which has been renewed yearly since then. Currently, UCF students and faculty have free access to all JoVE multimedia resources through the UCF library's subscription. JoVE offers topic-specific resources, including videos and demonstrations, to help with concept comprehension and exam preparation. Their resources include several pedagogical supports for the faculty. For example, each instructional video has an assessment component in the form of a multiple-choice quiz. Another desirable feature of JoVE is that the resources can be seamlessly and easily integrated and imported into Canvas. JoVE offers a free service through their subject matter experts to assist faculty in developing and incorporating JoVE resources into Webcourses.

In the fall of 2022, I included JoVE videos in my statistical methods in psychology course, both in the fully online and the mixed-mode sections of the class. JoVE's faculty support team provided me with all the necessary materials to use their resources. In an initial 30-minute zoom meeting, JoVE's representative discussed the various pedagogical tools available through the UCF subscription. They also asked for a

list of topics I cover in my course. Based on that information, JoVE's subject matter experts put together a playlist of videos and interactive content for my review. Upon my review and approval, they sent me a playlist of videos in a Common-Cardridge format that I was able to embed directly into the weekly modules in Canvas. The import package included the videos and the assessment materials for each video. The JoVE Marketing team even helped me to create a student survey to assess the effectiveness of JoVE videos in my classes. Lastly, the support team designed a page for my Canvas site to introduce JoVE resources and to encourage students to take advantage of the product in the course; Figure 1 below:



Make Classroom learning more interesting with JoVE!

Classroom resource



Students watch the JoVE videos posted in the Canvas module. This would give students a visual walk-through of the concepts that will be taught in the class.



Assessment



Students attempt the Canvas quizzes posted. This gives the instructor the opportunity to assess how well students understand assigned material.

To evaluate the effectiveness of the JoVE resources, I surveyed my students at the end of the semester. A total of 38 students completed the survey questions. The feedback I received was mostly positive. Below are the results of the student responses to a few survey questions:

JoVE videos were useful resources.

15% somewhat agree, 25% agree, and 41% strongly agree.

JoVE videos helped with clarifying some of the topics covered in the textbook.

15% somewhat agree, 26% agree, and 41% strongly agree.

I prefer learning statistics with JoVE videos.

19% somewhat agree, 22% agree, and 33% strongly agree.

The quizzes over the JoVE videos helped me to assess my understanding of the content covered in the videos.

15% somewhat agree, 30% agree, and 33% strongly agree.

I recommend including the JoVE videos for this course.

19% somewhat agree, 22% agree, and 44% strongly agree.

JoVE videos helped to improve my test scores.

19% somewhat agree, 15% agree, and 30% strongly agree.

To illustrate the effectiveness of JoVE videos in my course, I have also included below a few student comments:

- “Explained topics in a way that was easy to understand.”
- “I thought that they did a good job at explaining topics and that the videos were short.”
- “They were an easy to understand complement to the course material.”
- “The JoVe videos and assessments helped me understand the topics more clearly.”
- “The JoVE videos and assessments were useful for explaining concepts in a slightly different way than the textbook and summary did.”
- “In my opinion, the JoVE videos are an excellent tool to enhance our knowledge in statistics. I wish there was one for each chapter.”
- “Having the transcript for the videos was extra helpful for me, if you keep them I highly recommend keeping the transcript with them! “

Based on these preliminary results, I am pleased with the positive reception of JoVE by students. It is particularly encouraging that students in my mixed-mode class that has more in-person interactions also found JoVE videos helpful when compared to my fully online students. I am also encouraged by the positive feedback from my transfer students at the Sanford/Lake Mary campus, who are typically from underserved communities. This is important to me because I was initially looking for an innovative way to support students who were most negatively affected by an abrupt switch to fully remote instruction. I attribute the positive feedback I received partially to the trend that students increasingly search for tutorials and instructions in a video format instead of a text format. Interestingly, in one of the workshops that I attended during the 2022 Holiday Retreat at the Faculty Center, there was a reference to the phrase, “students don’t Google, they YouTube,” to describe student search preferences.

While the pandemic posed many challenges to educators by forcing them to move their course delivery to fully online in a very short time, it encouraged and brought about rapid technological advances that enabled faculty to offer more engaging and interactive online instructions. JoVE educational resources with a dedicated support team as an example of

such innovations has proven to be a valuable tool to enhance student engagement with the course materials and to improve student learning outcomes. Based on initial positive results, I have asked JoVE’s support team for a playlist on basic math skills. My goal is to provide additional support for students who may not have the essential math skills required for my statistics class. As a rich and free resource with an excellent faculty support team, JoVE has been a valuable tool in my statistics class, both in the mixed-mode and the fully online sections. I am excited to offer JoVE resources to my transfer students so they can have free access to effective supplemental materials to support their learning. I also plan to request a playlist of videos and assessment materials for my General Psychology, Cognitive Psychology, and Research Methods courses. The following page offers instructions on how to access and embed JoVE’s content into Webcourses.

[Getting Started with JoVE](#)

Finally, I believe that providing access to free supplemental learning resources to all students will contribute to promoting academic equity, inclusion, and diversity.

Enriching STEM Faculty Development through Collaborations with the Discipline Based Education Research (DBER) Community **Erin Saitta and Julie Donnelly**



Erin Saitta is Assistant Professor of Chemistry. Her research addresses professional development interventions, active learning, and mixed reality training.



Julie Donnelly is a Lecturer in the Chemistry Department. Her main research interest focuses on STEM faculty adoption of effective instructional practices.

The National Research Council (NRC) describes Discipline Based Education Research (DBER) as research that “investigates learning and teaching in a discipline using a range of methods with deep grounding in the discipline’s priorities, worldview, knowledge, and practices” (NRC, 2012, p. 1). In essence, DBER faculty are proficient in a STEM field with expertise in educational research and are intimately connected with, and often housed directly in, their disciplinary departments. In both of our cases, we are

faculty in the Chemistry Department who conduct chemistry education research (CER). Recently we have been reflecting on our role as DBER faculty, specifically CER, in the effort to improve teaching and learning in STEM higher education. We acknowledge that there are many stakeholders invested in this effort in understanding how faculty can be best supported to implement effective instructional practices. Considering our positions as CER faculty and background in facilitating faculty development (FD) in the UCF Faculty Center, we became interested in how, as change agents, DBER faculty and centers for teaching and learning (CTSs) are working together.

Our contributed chapter to *The Handbook of STEM Faculty Development* was published earlier this year. In our chapter, *The Role and Influence of the Discipline-Based Education Research (DBER) Community on STEM Faculty Development*, we shed light on the relationships between DBER and non-DBER change agents involved with faculty and graduate teaching assistant professional development.

To describe the role of DBER in STEM faculty development, we examined two sources of evidence: 1) publications on STEM FD (peer reviewed articles & conference proceedings, dissertations, and a working paper) between 2006 and March 2020 and 2) abstracts of STEM FD projects funded by the Education and Human Resources – Improving Undergraduate STEM Education (EHR-IUSE) program at the National Science Foundation (NSF) through 2020. Not surprisingly, we found that DBER-influenced STEM FD research has increased over this time. More notably, we found that most of this research is conducted by discipline-based researchers (outside of CTLs) and that STEM faculty development research is frequently published in discipline-specific and STEM journals as opposed to teaching and learning journals. Our findings revealed a lack of collaboration or communication between discipline-based researchers and CTLs, a key change agent.

We acknowledge that there is likely more collaboration between DBER and CTL change agents that is not highlighted in these sources. However, there is a link between the two that could be better exploited to facilitate change. Based on our findings, we proposed some types of projects that could strengthen and make more visible the collaboration between DBER and CTL change agents.

To start, cross-discipline collaborations and discussions can be a valuable step in moving efforts that began in one discipline to investigate the transferability and generalizability of approaches to benefit a wider STEM and higher education community. Experts in CTLs could lend their experience as faculty developers to help DBER scholars maximize the implementation of their research at the local institution. On the other hand, DBER faculty can provide expertise about the

unique complexities and disciplinary norms that exist around teaching and learning in their discipline.

One of the ways we envision more of these collaborations to increase is by considering the motivations for faculty to engage in faculty development and how to lessen the institutional, departmental, and personal barriers that inhibit change. Creating highly regarded ways to showcase products of STEM FD could be a way to encourage participation because the products are valued by the culture of the STEM disciplines. For example, DBER faculty and CTL experts could collaborate to shape STEM FD to mimic the research process through SoTL projects, collaborations on grant proposals, and conference presentations that showcase the change process.

At UCF, we have seen these strategies modeled in many ways by the Faculty Center. First, as DBER faculty, we have been sought out to lead workshops for teaching and learning and SoTL days and at conferences, serve on search committees, and write articles for the *Faculty Focus*. These practices demonstrate that the Faculty Center values and has interest in helping to disseminate the implications of our work. The Faculty Center has also shaped FD to mimic the research process in a few ways. For example, the *Faculty Focus* and several of the FCTL events are places faculty can disseminate meaningful initiatives of innovation in their teaching. Faculty across disciplines are also encouraged to submit their SoTL work for showcasing on the Faculty Center website.

Additionally, both of us benefited from post-doctoral positions at FCTL where we were able to conduct research and contribute to DBER scholarship while designing and implementing FD programs. Framing the position as a post-doctoral position allowed the role to be understandable to the STEM community and support our trajectory in DBER academia.

We are looking forward to continuing and building upon our existing relationship with the Faculty Center to find ways to situate STEM FD in DBER. We hope this will help to support efforts to improve STEM teaching and learning at UCF and that dissemination of these collaborations could catalyze change beyond UCF.

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The World Doesn't Revolve Around Elon Musk; Can Universities Force Students to Come Back to Face-to-Face Classes?

Lauryn De George



Lauryn A. De George is Associate Instructor in the College of Business. She has skills in pedagogy creation and implementation, curriculum development and learning management for undergraduate students, mid-career learners and executives. She has been a faculty member since 1998.

Elon Musk. Love him or hate him—you have to admit, he's got swagger and influence.

In June 2022, Tesla CEO Musk announced that employees must spend at least 40 hours per week in the office or resign. The reason for this mandate: according to Musk and reported by NBC News, “Tesla would not be able to ‘create and actually manufacture the most exciting and meaningful products of any company on Earth’ by ‘phoning it in’” (Bendix, 2022). Naturally, media outlets and research scientists had a field day unpacking this unexpected and controversial directive. Even more interesting is that this approach stands in stark contrast to the policy at Twitter, which Musk agreed to acquire in April 2022. That's after Twitter CEO Parag Agrawal said in March 2022 that “employees could work full time from home ‘forever’ or choose to return to the office, whatever they felt was most productive and creative”. Musk later threatened to back out of the \$44 billion Twitter takeover, prepared for the pending lawsuit, but eventually completed the deal. All in a day for Elon Musk.

But the center of the higher education world isn't, nor should it be, Elon Musk. It's the passion for learning, engaging with students and providing a quality of education that leads to student success and long-term economic benefit to society. This is accomplished by faculty encouraging students to apply knowledge, attain skills and abilities and develop potential solutions in real-world situations. Yet Musk's directive begs to consider this: if he and other powers-that-be can potentially force employees back to the office post-pandemic, can universities force students to abandon virtual learning and only offer face-to-face classes? And if so, should they?

It's no secret that higher education has changed in the midst and wake of Covid 19 as the world switched to remote learning. Advantages and disadvantages have been clearly cited in numerous studies including Yuhanna, Alexander and Kachik (2020) and Dumford (2018). It's also no secret that both students and faculty prefer to take classes in a hybrid

of in-person and online. A study conducted by Cengage's Digital Pulse survey and reported in Campus Technology, author Rhea Kelly commented on polls of “1,469 students and 1,286 students across 856 United States institutions about how higher education is changing in the wake of Covid-19” (Kelly, 2021). This study found that “nearly three-quarters of students — 73 percent — said they would prefer to take some of their courses fully online post-pandemic and about half of faculty (53 percent) felt the same about teaching online.” (Kelly, 2021) The preference for remote work is reinforced by the non-academic working world. “In a 2021 survey published in the *Harvard Business Review*, 75% of US employees reported a personal preference for working from home at least one day a week, and 40% of employees indicated they would quit a job that required full-time in-person work” (Barrero, 2021).

This leads to a complete contradiction. On the one hand, there are students preferring online learning and faculty preferring online teaching. Both with pending and established studies of success. On the other hand, our world has employers doing just the opposite—forcing employees to go back to the office. Perhaps it's the notion of being forced. As freedom and independence being core tenets of our country, is being forced back into the office being considered an assault on our rights? Are we, as a country of individuals, still reeling when medical professionals wanted to force our families to receive the Covid 19 vaccine in the pandemic?

There's really only one conclusion in an expanding sea of questions. It'll be very interesting to see how both universities and employers handle differences in needs of students, employees, and society.

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Trying to Stay Relevant

Gregg Buckingham



Gregg Buckingham is a Lecturer in the College of Community Innovation and Education (CCIE). He regularly teaches a mix of undergraduate and graduate courses, both face-to-face and online, in the School of Public Administration. He comes to UCF following 28 years working for NASA.

Teaching is my second career and when I meet students in my classes, they see someone quite a bit older than they are. I reflect often if these undergraduate students perceive I have something relevant to say to their generation. These students are likely born after the year 2000 and some might just live into the next century. They are part of what Jean Twenge calls, the iGeneration (iGen). This generation has never lived without the Internet, and smartphones have existed nearly all their life.

In her book *iGen*, Twenge (2017) utilizes several sources to build a portrait of this generation. Of course, categories don't describe any given person but illuminate trends among a group at large. Her overall motto for this generation is one which has 'grown up slowly' and the biggest overall difference is how they spend their time. Compared to previous generations at the same age, iGens tend to go out with their parents rather than friends, date less, drink less, have less sex, and, shocking to me, are in no hurry to get their driver's license. I got my license as fast as I could. They also spend less time in high school working, volunteering, and on extracurricular activities. They have just as many friends but communicate more through technology.

Twenge notes they also have a higher rate of mental illness and suicide than previous generations. She states that teens are "more physically safe than ever, yet they are mentally vulnerable" (p. 3).

Dr. Corey Seemiller at Wright State University also writes about iGens, or as she calls them, GenZ (2016). One of her conclusions, like Twenge, is that "interactivity trumps physical activity." She notes iGens have a more sedentary lifestyle. What motivates them, in part, is "advocating for something they believe in, making a difference for someone else." Here are findings about their learning:

- They value experiential learning and applying it to real problems
- They appreciate practical learning that gives them tools and skills for their work life
- They like to learn independently and at their own pace
- They value social learning, but learn "next to each other" via methods like Google docs

- They want to play a role in their learning and do not favor the lecture method of learning
- They appreciate trial and error opportunities to learn
- They want authenticity and transparency....They like the idea of human beings being behind things.

Not solely because of this research, but in concert with it, here are several strategies I use to try and maintain relevance to this generation of learners. None of my strategies include using Lady Gaga lyrics or quoting *Game of Thrones*! All of them fit under the idea of integrative learning – the idea that learning should involve students reflecting on their experiences—academic and otherwise—to connect them to real-world contexts and encourage them to plan for their futures post-graduation. For reference, I teach public administration—how to work in government or non-profits, and my undergraduate classes are limited to about fifty people, whether online or face-to-face.

1. Demonstrate a welcoming culture by transparently discussing characteristics that apply to our students such as being a transfer student or first-generation student. Openly discuss challenges I faced as an undergraduate student. Hold an office visit with each student to get to know each other as individuals.
2. Create assignments that allow students to demonstrate the competencies taught while ensuring students understand the relationship to their lives. One example is a sensory exercise asking students to visit a public space such as a park, to slow down, and to sit and reflect on the space. They capture what they hear, what they see; they imagine what it took to create and develop the space, and to maintain it. Most have never thought about public administration and find this valuable.
3. Utilize speakers in the profession, not only to understand the application of concepts being learned, but also to have students reflect on their skills and decide if that position might be a career match for them. I ask speakers to talk about their challenges and their insights – both as students and professionals.
4. Use the write-rewrite method for larger assignments. Suggested by UCF's Writing Center, students write all or a portion of a large assignment, receive feedback and improve their product for the final submission. This allows students to reflect on their work, to bite off smaller portions of the assignment at a time and reduces 'night-before' papers on complex topics.
5. Utilize strategic planning to develop a personal plan for their remaining college time to prepare them for their work life or graduate school. This includes reflecting on the courses they've taken, their values, stakeholders, strengths and weaknesses and make an action plan they can implement. They relate their strengths to the NACE competencies.

6. Always explain the “why.” One constant for students in research methods is to ask, “why am I learning this; I will never do research?” I meet this head-on by having students think about decision-making—public funds are not spent (usually) without considerable research into alternatives, outcomes, and citizen input. In their life, buying a car, buying a house, choosing a university—all involve variables, questions, and determining the best alternative.

I am collecting data from multiple sections of one class, but here are a couple of student comments I hoped I would see: “These types of assignments are helpful because they encourage students to learn and investigate while also supplementing important knowledge that can be used in the field but also in our everyday life to be more informed citizens.” “The assignments in this class have been the most helpful out of all of my classes as far as real-world application for my degree.” Staying relevant is a continuous process of listening to students, learning from colleagues, and not holding too tightly to old ways.

“Git”-ting to the One

Joshua Eubanks, Lealand Morin



Joshua Eubanks is an Instructor of Economics. He completed an M.S. in Economics from UCF which focused on business analytics. From 2018 to 2022, he was a Data Analyst at Siemens Gamesa, where his main responsibilities were data visualization, risk assessment, and predictive maintenance using R, Python, SQL, Tableau, and Power BI.



Lealand Morin is Assistant Professor of Economics. His Ph.D. is from Queen's University, Canada. His research is focused on empirical and theoretical techniques in econometrics. He teaches business analytics, econometrics, statistics, time series analysis, and topics in machine learning and data mining.

From 2014 to 2018, he worked as a Statistician and Data Scientist for Capital One Bank.

Ask students in the College of Business what jobs they want. Many will say they want to be analysts, whether in marketing, human resources, or finance. To be valuable analysts in the digital age, they need to know how to collect and process data using software. This is uncharted territory for our students—if they were comfortable with computers, they would be Computer Science majors. We guide them with a modern system of instruction that Lee developed while training new analysts when he was a Data Scientist at Capital One

Bank. With a tool called GitHub, students follow us on their computers in real time. This system works because writing software is not a spectator sport. Using GitHub keeps students engaged, provides detailed feedback, reduces students' stress, and differentiates them from the competition, which Dean Jarley calls, “Getting to the One.”

GitHub is a leading repository for professional software developers. It is version control software, which is necessary in computing projects because features of a program evolve over time: intermediate versions must be stored between contributions of individual programmers. In the course, we act as the lead programmer, reviewing, modifying, and ultimately accepting their work. The students act as junior programmers and earn their place in the profession. Upon creating an account, they join a community of computer programmers who contribute to projects in teams.

Every class starts with a description of the topic. Then the instructor distributes computer programs on a code repository in a GitHub profile. Students run the commands along with the instructor and the results of their own commands appear before their eyes. The class pauses at predetermined checkpoints to troubleshoot any errors together. It takes intuition to identify the need for feedback. Usually, students mask their programming errors for fear of embarrassment. Sometimes it's written all over their face. It helps that we emphasize that everyone makes mistakes, including their instructor—except, of course, our errors were introduced by design.

Outside of class, the real-time nature of the GitHub workflow builds a faster, closed-loop feedback system. At any time, a student can send a link to their programs to ask for assistance. We can download their code, run their program, and help them troubleshoot their problem, without a series of back-and-forth e-mails. Problems with computer code are most easily communicated with, well, computer code.

GitHub also helps us enforce accountability. For example, in one of his classes, Josh required students to work in groups on an empirical project. Some students claimed that a team member did not contribute. Since GitHub keeps a record of all the contributions by each student, Josh easily verified the group's claim.

Our SPI ratings in the category “Effectiveness giving useful feedback on course performance” are higher than our department average. We attribute this to providing pointed feedback using these professional software development tools. As the “lead developers,” we provide feedback on their submission directly. We upload changes, and the student can easily see our color-coded feedback based on our contributions to the program. Moreover, we provide all this

feedback privately; of course, we pass all FERPA-protected communication through Webcourses.

As a measure of the marketability of the skills learned with this tool, Lee received this message from a student: “I wanted to thank you so SO much. You have made coding and learning python a breeze. I have learned so much from you that I was offered a spectacular job making \$XXXK coding today that starts this summer! I honestly can say if I didn’t have you as my teacher I would have never had this opportunity. I am so grateful for you and I would recommend you to every single one of the people I know in the economics major.”

This student was part of the first iteration of the course which did not require any prior experience with programming. She not only understood the content but was also able to secure a job usually reserved for graduate students—after only one course.

GitHub helps students create a data science portfolio. Before coming to UCF, Josh was in the final round for a position at a Fortune 500 company and was asked for “his portfolio.” Since he had never developed one, he cobbled one together over a weekend, but by Monday it was too late. Having learned this lesson, he quickly narrowed his search for his replacement at Siemens Gamesa by looking at those who had a GitHub profile. After gaining additional insight into the applicant’s interests, coding style, and skills, he narrowed it down to “the one.”

Our goal of using GitHub is not only to facilitate learning, but also to get students to “the one.” We reinforce that students need to focus on:

- **Collaboration:** GitHub is a forum for analysts and coders to collaborate within the industry.
- **Communication:** the GitHub profile creates an identity in the profession to advertise skills in the open market.
- **Comfort Zone:** GitHub guides them into uncharted territory, where creative problem solving takes place.

Even if students never use GitHub after our class, they will be able to work with analysts who do, which is why we find it useful in our quantitative undergraduate- and graduate-level classes. As two instructors who were trained in the pencil-and-paper days, we have unlocked a method of helping the digital native navigate the workplace of tomorrow.

Yellowdig Pilot in Graduate Online Nursing Courses Erica Hoyt



Erica Hoyt is a Certified Healthcare Simulation Educator (CHSE) and a Certified Nurse Educator (CNE) who is passionate about educating the next generation of professional nurses. She is a Senior Lecturer at the College of Nursing, instructing in lecture, clinical, and lab settings using online, face-to-face, and simulation modalities in graduate and undergraduate programs.

Although my student feedback indicated my online engagement was excellent, I spent more time assigning a grade using Webcourse discussion boards (DB) than discussing the content. In our graduate program, the student responds to a prompt as an original post by Wednesday night, followed by two scholarly replies related to the original post by Sunday night. I felt the DB was robotic and a “chore” for both the student and me. I wanted my asynchronous discussion to feel exciting, scholarly, and more like the camaraderie I felt in my synchronous graduate courses.

I teach in the nurse educator program with students desiring experience with online technologies. UCF invited online instructors to participate in a pilot program using Yellowdig, advertised to increase student engagement online. I first trialed Yellowdig in my Summer 2022 NGR6718 Evaluation in Nursing Education course to replace the Webcourse online discussions. In this course, the DB is 30% of the final grade; historically, the DB grade range was 90-100%. The Yellowdig score would replace the DB score.

The goal in Yellowdig is for the student to obtain 1000 points per week for the semester’s duration. If completed, the student receives 100% for the Yellowdig final grade. The Yellowdig developers strongly advised against adjusting their evidence-based point allocation (Yellowdig, 2021), especially during the pilot. I complied.

In Webcourses, our graduate DB “original post” rubric allocates points for scholarly thought, excellent grammar, 300-750 words, and appropriately cited APA academic references. In Yellowdig, the student received 280 points for their original post. The rubric for replies in our program allocates points for a scholarly reply written within word limits, references, and following APA to two initial posts. In Yellowdig, replies, called “comments,” receive 210 points for each comment.

In Yellowdig, students receive 280 points for an original post and 420 for their two replies/comments equaling 700 points each week. Earning the remaining 300 points requires more engagement. My favorite feature of Yellowdig is that the

platform gamifies learning by rewarding points each time a student receives a reply/comment to their original post. Instructors also can provide “accolade” points for being the first post, extremely insightful posts, or another instructor-created accolade. Those posts with recent or frequent comments move up in the discussions receiving more visibility. Students can easily embed most media or create polls increasing engagement and attracting readers to their post. The more the student participates, the more points they accumulate.

I needed to convert the course discussion prompts into what Yellowdig calls “conversation themes.” According to [Yellowdig \(2021\)](#), discussion prompts are similar to assignments or essay questions found on an exam. Conversation themes are more open-ended and encourage more natural dialogue between students and instructors. I did not want to change the course DB topics, but I tried to make the theme more debatable.

Next was to orient students to the Yellowdig platform. Yellowdig has orientation materials in text and video for instructor use. During the first week’s “meet and greet” topic, I received a mix of excitement and concern about using the new platform. A few students felt intimidated as Yellowdig feels like social media they did not use. The second time I used Yellowdig, I customized the orientation by combining several topics and media. I can use this in any of my Yellowdig courses.

If students had challenges using Yellowdig and did not find the answer to their question in the built-in Yellowdig “help guide,” they could post to the “help topic.” For students who struggled with Yellowdig, I would Zoom with the student sharing their computer screen, and we would solve the problem together. I was part of a Yellowdig community of faculty and UCF representatives to receive support. I also met with the Yellowdig designers to ensure the platform met my needs.

After three weeks, I requested anonymous feedback about Yellowdig. Most loved Yellowdig and felt it was a more enjoyable experience than Webcourse DBs. The most frequent challenge was finding posts. With the help of Yellowdig, I provided tips for managing the conversation feeds. Was it a problem that I felt overwhelmed with the number of posts because my students posted four times the amount compared to Webcourse DBs?

Using Webcourse DB, students created one original post per topic; the same occurred with Yellowdig. In Webcourses, students replied twice per topic; in Yellowdig, students replied an average of five times! Yellowdig allows you to provide a reaction (as an emoji) to items you read. My courses averaged 100 emoji reactions per topic, meaning students engaged with the conversation.

I administered a summative assessment of Yellowdig adapted from the UCF’s Yellowdig pilot evaluation. Less than 50% ($n = 28$) responded from the three courses trialed in the Summer and Fall of 2022. Responses to statements ranged from 5 (*strongly agree*) to 1 (*strongly disagree*). Yellowdig: promoted interaction with classmates ($M 4.5, SD 0.9$), fostered a more student-centered activity instead of teacher-centered ($M 4.4, SD 0.9$), online discussions were more interesting ($M 4.3, SD 1.1$), Yellowdig should be used for these courses again ($M 4.1, SD 1.2$), Yellowdig increased my enjoyment of the online discussions ($M 4.1, SD 1.2$), and motivation to engage in discussions because of Yellowdig ($M 3.9, SD 1.3$).

I enjoyed using Yellowdig. I would check in on the conversations in my courses with Yellowdig more often than in my courses with the traditional DB. The flow of the discussion was more inviting. In Yellowdig, the instructors don’t “grade” the conversations. Therefore, I also noticed I had more time to focus on the content instead of grading.

The conversations were scholarly yet more relaxed. I also liked how the community could comment on any topic during the semester. If someone came across an exciting article about a previous topic, they could tag it, discuss it, and receive points.

Students and I have overall had a positive experience with Yellowdig. I met my goal of having asynchronous content feel more synchronous and alive. I have a course with students who used Yellowdig with me last semester; by request, we continued using Yellowdig this semester. I have used Yellowdig a second time in NGR6718 and have used it in two other courses.

I hope that UCF integrates Yellowdig into Webcourses permanently

How I Learned to Love GPT-3

Enrique Guerra-Pujol



Enrique Guerra-Pujol is Associate Instructor of law at the University of Central Florida. His teaching and research explore the intersection between popular culture and the law as well as the problem of legal failure, i.e., when the law fails to protect property rights or enforce voluntary trades. Before coming to UCF in 2014, he was a Ronald Coase Fellow and a law professor at the Pontificia Universidad Catolica de Puerto Rico.

Have you heard about the new powerful chatbots cheating genies that Microsoft and Google have recently unleashed? One of these genies is GPT-3 a/k/a ChatGPT, a powerful artificial intelligence (AI) computer program created by the “OpenAI” research lab and launched to the public in late 2022. Among other things, ChatGPT can answer questions, write up a research article, translate a text, generate a blog post, narrate a story, or compose a poem. This program is so powerful that it can even program other computers!

To conjure this genie out of its bottle and make it carry out any one of these tasks, all you need to do is type your command directly into the chatbot. As a result, many students will no doubt be tempted to use these new AI programs to complete their academic assignments, and because these genies are so enticing and because they will only get even more sophisticated and powerful (GPT-4 is scheduled to be released later this year), instructors will have but two options, broadly speaking. One is to resist and fight back against our Big Tech overlords. The other is to “lean in” and join the revolution!

For my part, resistance is futile. This semester alone, for example, I have over 800 enrolled students spread out across five sections in my large business law and ethics survey course. To make matters worse, Big Tech has hundreds of billions of dollars in resources, while I am a mere college professor with a small handful of teaching assistants and a couple of liberal arts degrees. Like the lyrics in the song “Right Hand Man” from the *Hamilton* musical: “we are outgunned, outmanned, outnumbered, and outplanned.”

Therefore, instead of trying to fight the inevitable, instead of tilting at these Big Tech windmills, I have decided to allow this dangerous Trojan horse into my courses and accept these AI gifts from our Big Tech overlords. Now, when I post a discussion question, research problem, or ethical dilemma on Canvas, I give my students the option of looking up the answer

on ChatGPT first—or on Bard, Google’s version of the genie—and to post a screenshot of the AI’s answer. In addition, I also ask my students to review and revise that AI’s response and to cross-check it for accuracy. I ask how they would improve the AI’s answer, and what substantive or stylistic changes or additions or substitutions would they make. This way, my students will get to work with this exciting new technology first hand, and at the same time, they will have an opportunity to develop their critical thinking skills.

What could go wrong?

Teaching, Playing, and Learning at the Sandbox

Houman Sadri



Houman Sadri is Associate Professor of Political Science at the SPSIA since 1995. He earned a PhD from the University of Virginia and completed a fellowship at the Hoover Institute of Stanford University. His area of specialization is international affairs focused on the politics of the Caspian Sea and Persian Gulf states.

Last year, I finally got the rare opportunity to use the popular FCTL Sandbox. This room is unique among UCF classrooms since it is well-equipped with some of the most recent teaching and learning friendly programs and equipment. Most students and I had a rewarding experience. For this term, I tried to reserve the Sandbox, however, I faced 2 limiting factors. The first is the popularity of the Sandbox. There are many instructors who quickly understood the value of this room, had used it previously, and had already fully adjusted their teaching methods to utilize the room’s facilities with creative and excellent results. The second limiting factor is the room’s capacity, which is only 54. I mostly teach larger undergraduate courses whose enrollment ranges from 60 to 75.

I taught the Revolution and Political Conflict class which was mainly in the Instructor-Centered mode. With some adjustments to my teaching style, the Sandbox provided the best chance to utilize its screen-sharing technologies for students to actively participate in discussing our weekly topics both within their class groups as well as when presenting their individual group’s final products to the entire class. Course evaluations showed that the overwhelming majority of students had a positive experience; although, there were a few very vocal ones who preferred only the traditional lecture classes and wanted me to switch to that teaching mode. According to our class’s anonymous surveys, these students

did not see any value in the contributions of their peers and preferred to hear only my lectures. I understood their wishes to remain passive, take notes from lectures, and pass the course. I was not disappointed with such comments and tried different active-learning styles to stimulate student-centered learning in any way possible along with adding mini 10-minute lectures in the Chunk-Chew-Check style.

Class Structure

My international relations classes are structured to begin by covering methodological issues. Then, we discuss the main concepts and theories of the field. Finally, we investigate policy issues and their connections with our methods and theories. The main function of the final section is to establish bridges between practical issues with methods and theories. This way, students learn about the significance, value, and function of connecting current events to applicable scientific methods and theories.

What does the Sandbox Offer?

The Sandbox is a special classroom, where instructors experiment with different pedagogies and use various collaborative and digital technologies to increase the impact of their teaching skills and improve their students' learning abilities.

The advantages of the Sandbox are mixed with the challenge of altering our teaching plans to maximize the utility of technologies available to students and faculty. The Sandbox collaborative tools and technologies require instructors and students to be on the UCF_WPA2 campus network in order to function. My experience showed that the Sandbox provides excellent opportunities for active-learning strategies, including:

1. Converting the format from instructor-centered to student-centered
2. Employing collaborative/group-based learning; and/or
3. Utilizing problem-solving and case-study learning.

I already regularly use many of the aforementioned strategies in other classes. Nevertheless, the Sandbox technologies enable me to explore new ways to engage my students in an active learning format. Fortunately, the FCTL staff, especially Kevin and Eric, are always available to help with the strategizing of such teaching and learning techniques. The Sandbox is serviced by the OIR, and I found their staff, especially Doug and Todd, extremely helpful in dealing with the technical issues caused by the network, computer, or room monitors, each of which is connected to a specific system that allows screen-sharing for students and faculty. Both FCTL and OIR staff assisted me, as I occasionally faced both teaching and tech challenges.

Conducting My Revised Class in the Sandbox

I significantly revised my Sandbox class to be student-centered by involving students in covering our weekly lesson plans. Each class group researched short (up to 5-minute) online news videos and pictures about a current political conflict. They had to address the following:

1. What is it about? Here, they described the facts of the event, its coverage, and the media source.
2. Why it is significant? They explained the importance of the piece for local and foreign audiences. They also showed a causal relation that they discovered.
3. How is the piece related to class weekly topic and readings? They provided an estimation of relevant method, concept, theory, and/or policy that they found in the news media.

When I compared their findings with my traditional lecture, I noticed that they had consistently covered about 76% to 88% of my weekly outlines. Of course, there were always some residual materials and topics that were not discovered by students, so I added them to the end of our class discussion. However, life is not perfect. I was very pleased that, on their own, my students could realize most of our class learning objectives. This technique empowered them to be more curious, stay active, and find a variety of answers on their own. The result of their exams and reports indicated that this style helped my students with their critical-thinking and problem-solving abilities in addition to improving their reading, attention, writing, and presenting skills.

Be Aware

1. While applying for the Sandbox use, clearly explain your innovative teaching and learning strategies and how Sandbox technologies will help your students. This increases your chances to secure the room.
2. Be prepared that despite using a variety of techniques, there might be a small group of students who will not drop your course to take a traditional lecture class that they would prefer, but will drag their feet at any stage of the course, and will still expect you to lecture in an old fashioned style. In other words, you can't win them all, although we know that student-centered courses involve more active participation, and are more beneficial for learning in the long run.
3. Using the Sandbox, I enjoyed conducting my class even more. I noticed that many students enthusiastically become active participants and comprehend some of the more challenging topics that were covered. There is truly no higher joy than witnessing students who are succeeding and becoming long-life learners.

Submissions

The *Faculty Focus* is a publication for all instructors at the University of Central Florida. This includes full-time and part-time faculty and teaching assistants at all UCF campuses. Its purpose is to provide an exchange of ideas on teaching and learning for the university's community of teachers and scholars. It is envisioned that this publication will inspire more dialogue among faculty whether in hallway discussions, departmental meetings, or in written articles. This represents an opportunity for faculty members to reach their peers throughout the growing UCF community. The *Faculty Focus* invites you to contribute your ideas on teaching and learning in a short essay. See the guidelines for submission online at <https://fctl.ucf.edu/teaching-resources/faculty-focus/>. Please send your submissions to fctl@ucf.edu.

The ideas and opinions expressed in the articles featured in the *Faculty Focus* belong to the authors and do not necessarily reflect those of the Faculty Center or of UCF.



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